

REMARKS

Claims 1 to 18 are currently pending in the present application. Claims 1 to 18 are amended herein. No new matter is added by the amendments to the claims. Reconsideration of the present application, as amended, under 37 C.F.R. 1.116 is respectfully requested.

The Action again points out that the specification lacks some of the suggested section headings. Applicants again respectfully decline to add additional section headings as they are not required in accordance with MPEP §608.01(a) and may be unduly limiting to the disclosure.

Claims 1 to 3, 5 to 7, 15, 16 and 18 stand rejected by the Action under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,352,149 to Gartland (hereinafter "Gartland"). Applicants respectfully submit that Gartland does not expressly or inherently disclose all of the elements set forth in independent claims 1, 15 and 18. Thus, Gartland does not anticipate claims 1, 15 or 18 or the claims which depend therefrom.

Claim 1 has been amended to clearly claim a fabric switch comprising: an inner cord including at least two conductive cords releasably connected in linear series; and a non-conductive cord enclosing said inner cord, wherein said non-conductive cord is stretchable to release the contact between said at least two conductive cords electrically,

and wherein said non-conductive cord is resilient to enable the contact between said at least two conductive cords to be resumed electrically.

Claim 1 clearly claims a switch formed of fabric materials. Gartland fails to disclose a switch formed of fabric materials. In fact, Gartland is not directed to a switch for use in a fabric at all. Rather, Gartland is directed to the use of switches in a conveyer belt system formed of a vulcanized rubber. Gartland thus fails to anticipate the use or benefit of a fabric switch, as is claimed in claim 1. Moreover, the invention of claim 1 is an improvement over known techniques for providing an electrical switch system in fabric, which simply add standard electronic components to a fabric, because the invention of claim 1 facilitates manufacture of a switch system that is as close as possible to the manufacturing techniques used in the garment industry. Gartland provides no teaching for an electrical switch system in a fabric.

Gartland also fails to disclose at least two conductive cords that are both *stretchable* to release the electrical contact between two conductive cords and *resilient*, to enable contact between the cords to be re-established, as now clearly claimed in claim 1. The invention of claim 1 is a stretchable electro-conductive fabric, which includes an inner cord comprising at least two conductive cords releasably connected in series and a non-conductive cord enclosing the inner cord. In operation, the conductive fibers come in contact electrically when the woven fibers are in a relaxed mode and come apart when the woven fibers are in a stretch mode. Thus, the non-conductive cord is stretchable when pulled to release the contact between the two conductive cords that are in contact

electrically, thereby opening a circuit. Upon release of the pulling force the non-conductive cord resiliently retracts to its original position and a circuit is again established between the two conductive cords.

Gartland does not disclose a circuit that can be both broken and re-established. Rather, Gartland simply discloses a conveyor belt having sensors within the belt that serve as a rip detection system. According to Gartland, a section of a springwire conductor is formed into a microcoil springwire, which is employed as a sensor to detect rips in a conveyor belt. If the control circuitry senses a discontinuity in any of the sensors, it then signals motor controller to stop the motor. Resumption of the original position of the circuit is not disclosed by Gartland.

The materials employed in the manufacture of the Gartland conveyer belt provide further indication that Gartland does not contemplate a fabric switch, let alone such a switch that is both stretchable to release the contact between at least two conductive cords electrically, and resilient to enable the contact between the at least two conductive cords to be resumed electrically. According to Gartland, manufacture of the conveyer belt requires reinforcing cables running the length of the conveyor belt to be disposed between two gum layers. Sensors, such a microcoil springwires, are placed within the conveyor belt. The belt is then disposed in a compactor that applies pressure to a load carrying cover and a pulley cover to compress the components of the conveyor belt together. The completed conveyor belt assembly is then vulcanized. Thus, Gartland discloses a static rubberized system, rather than a flexible fabric system.

Accordingly, Gartland does not contemplate a fabric switch, let alone such a switch that is both stretchable to release the contact between at least two conductive cords electrically, and resilient to enable the contact between the at least two conductive cords to be resumed electrically, as is claimed in claim 1.

Independent claim 15 claims a method for permitting a person to activate a fabric switch, said method comprising the steps of: providing an inner cord including at least two conductive cords releasably connected in linear series and a non-conductive cord enclosing said inner cord; mounting both said inner cord and said non-conductive cords to a garment or furniture; stretching said non-conductive cord to release the contact between said at least two conductive cords, and releasing said non-conductive cord to enable contact between said at least two conductive cords to be resumed electrically.

Independent claim 18 claims a fabric switch comprising: at least two conductive fibers operatively associated with at least one non-conductive fiber so as to form an electrical circuit, wherein the conductive fibers connect when the at least one non-conductive fiber is in a first mode and disconnect when such fiber is in a second mode, and wherein the switch operates freely between the first and the second mode.

Claims 15 and 18 incorporate the limitations discussed above with respect to claim 1. Thus, claims 15 and 18 are patentable over Gartland for at least the reasons discussed with respect to claim 1.

Claims 2 to 3, 5 to 7 and 16 depend from claims 1 and 15 and provide further features, thus claims 2 to 3, 5 to 7 and 16 are clearly distinguishable over Gartland for at least the reasons discussed. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 102(e) of claims 1 to 3, 5 to 7, 15, 16 and 18 be withdrawn.

Claims 9 to 13 and 17 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,796,578 to White.

Claim 9 claims a fabric switch comprising: a matrix of woven fibers, said woven fibers being electrically non-conductive; a pair of conductive fibers interwoven in said woven fibers so as to form an electrical circuit; and, wherein said conductive fibers come in contact electrically when said woven fiber are in a relaxed mode and come apart in a stretch mode, and wherein said non-conductive fibers are resilient to enable the contact between said at least two conductive fibers to be released and resumed repeatedly.

Claim 17 claims a method for permitting a person to activate a switch, said method comprising the steps of: providing a matrix of non-conductive woven fibers (20) and a pair of conductive fibers interwoven in said woven fibers so as to form an electrical circuit; mounting both said woven fibers and conductive fibers to a garment or furniture; and, selectively stretching said woven fibers so that said conductive fibers come in

contact electrically when said woven fibers are in a relaxed mode and come apart in a stretch mode.

White is directed to an airbag deployment system which incorporates an occupant position sensor mounted on an airbag. Specifically, White provides a mechanism for venting an airbag before the airbag is fully inflated. White, similar to Gartland, does not disclose at least two conductive cords that are both stretchable to release the electrical contact between two conductive cords and resilient, to enable contact between the cords to be re-established, as now clearly claimed in claims 9 and 17. That is, White does not disclose a circuit that can be both broken and resumed. Rather, White is directed to a single deployment airbag system. Accordingly, independent claims 9 and 17 are not anticipated by White under 35 U.S.C. 102(e).

Claims 10 to 13 depend from claim 9 and provide further features, thus claims 10 to 13 are distinguishable over White for at least the reasons discussed. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 102(e) of claims 9 to 13 and 17 be withdrawn.

Claims 4 and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gartland. Applicants respectfully submit that claims 4 and 8, depending from claim 1, are patentable over Gartland for at least the reasons discussed with respect to claim 1. Specifically, Gartland fails to disclose either a fabric switch or at least two conductive cords that are both stretchable to release the electrical contact between two conductive

cords and resilient, to enable contact between the cords to be re-established, as now clearly claimed in claim 1. The Action states that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the switch in a car seat fabric, so as to indicate the condition of the fabric in presence of a driver or passenger”. Applicants respectfully submit that even if Gartland were employed as suggested by the Action, the resultant product would still fail to anticipate the invention of claim 1. That is, even if a switch were integrated into a car seat fabric, so as to indicate the condition of the fabric in the presence of a driver, there is no teaching, much less an identified need, for a means for enabling contact between conductive cords in a car seat to be re-established. Withdrawal of the rejection of claims 4 and 8 under 35 U.S.C. 103(a) is respectfully requested.

Claim 14 stands rejected under 35 U.S.C. 103(a) as being anticipated by White. Claim 14 depends from claim 9 and incorporates the limitations thereof. Accordingly, claim 14 is patentable over White for at least the reasons discussed above with respect to claim 9. Withdrawal of the rejection of claim 14 under 35 U.S.C. 103(a) is respectfully requested.

Allowance of claims 1 to 18 is earnestly solicited.

Conclusion

In view of the foregoing, Applicants respectfully submit that the specification, the drawings and all claims presented in this application are currently in condition for allowance. Accordingly, Applicants respectfully request favorable consideration and that this application be passed to allowance.

Should any changes to the claims and/or specification be deemed necessary to place the application in condition for allowance, the Examiner is respectfully requested to contact the undersigned to discuss the same.

Applicants' representative believes that this response is being filed in a timely manner. In the event that any extension and/or fee is required for the entry of this amendment the Commissioner is hereby authorized to charge said fee to Deposit Account No. 14-1270. An early and favorable action on the merits is earnestly solicited.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call David Barnes, Esq., Intellectual Property Counsel, Philips North America Corporation at the number below.

Respectfully submitted,

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